

DOCUMENTED BRIEFING

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*Performance-Based
Contracting in the
Air Force*

A Report on Experiences in the Field

John Ausink, Frank Camm, Charles Cannon

Project AIR FORCE

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A Report on Experiences in the Field

John Ausink, Frank Camm, Charles Cannon

*Prepared for the
United States Air Force*

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PREFACE

In its performance-based services acquisition (PBSA) activities, the Air Force focuses on telling a provider what the Air Force needs rather than how the provider should meet that need. The Office of the Secretary of Defense has set an aggressive policy that seeks to implement such services acquisition on a broad scale. The Air Force is pursuing an even more aggressive implementation program. This documented briefing seeks to support the continuing implementation of PBSA by identifying Air Force bases that have succeeded in implementing it in specific contracts, describing details of how they did this, and then developing lessons learned that the remainder of the Air Force can use to build on progress made to date.

The work draws on detailed, structured interviews with relevant contracting and functional personnel at 15 Air Force bases responsible for 22 performance-based contracts awarded between FY 1998 and FY 2000. The contracts focus on the activities of greatest day-to-day importance to operational contracting: military family housing maintenance, grounds maintenance, custodial services, food services, and refuse services.

This research was sponsored by the Office of the Deputy Assistant Secretary of the Air Force (Contracting), SAF/AQC. Although the analysis focuses on recent Air Force experience, it should interest anyone concerned with the implementation of PBSA in a government setting, particularly its application to the kinds of base services identified above. The research was completed in January 2001.

Research on this and related contracting topics continues in the Resource Management Program of Project AIR FORCE. For additional information, please contact the study leader, Dr. Laura Baldwin, at Laura_Baldwin@rand.org. To convey comments on this document, please contact the lead author, John Ausink, at John_Ausink@rand.org or (703) 413-1100, extension 5403.

PROJECT AIR FORCE

Project AIR FORCE, a division of RAND, is the Air Force federally funded research and development center (FFRDC) for studies and analyses. It provides the Air Force with independent analyses of policy alternatives affecting the development, employment, combat readiness, and support of current and future aerospace forces. Research is performed in four programs: Aerospace Force Development; Manpower, Personnel, and Training; Resource Management; and Strategy and Doctrine.

SUMMARY

A performance-based contract tells the seller what the buyer wants done, not how to do it, and since 1991 it has been the policy of the federal government that agencies use performance-based contracting methods to the maximum extent practicable when acquiring services. Department of Defense interest in performance-based contracting has increased in recent years, and in April 2000 the Under Secretary of Defense for Acquisition and Technology directed that 50 percent of service acquisitions be performance based by the year 2005. A variety of Air Force instructions, publications, and policies are in place to aggressively implement this policy.

The primary goal of this study is to use examples of successful Air Force applications of performance-based services acquisition (PBSA) to illustrate how to pursue these practices elsewhere. In this documented briefing, the results of interviews with personnel at Air Force bases that have used PBSA are arranged as a "walk-through" of the process of applying these techniques to the development of a contract. On the basis of these interview results, we reach several conclusions about what seems to work in the field and what needs to be improved, and we then summarize these conclusions in a list of lessons learned from experiences in PBSA implementation.

INTERVIEW RESULTS

We conducted interviews with contracting and functional (e.g., civil engineering [CE] and services [SV]) personnel at 15 Air Force bases representing five major commands (MAJCOMs). In these interviews, we discussed the implementation of PBSA in 22 recent contracts—most of them for military family housing (MFH) maintenance, grounds maintenance, custodial services, or food services. The 15 bases were "self-selected" in that they had responded to a request for examples of "successful" implementation of PBSA practices and had done so on the basis of their own perception of what success means.

Motivation for Using PBSA

Most bases applied PBSA techniques because of MAJCOM direction or the introduction of Air Force Instruction (AFI) 63-124.¹ A few, however, used the approach because of dissatisfaction with the performance of contractors selected by other methods and would thus have used PBSA even without headquarters direction. These self-motivated contracting offices generally expressed the most satisfaction with the outcome of the approach.

¹AFI 63-124, *Performance-Based Service Contracts (PBSC)*, April 1, 1999. This instruction prescribes how the Air Force will implement performance-based services contracting and quality assurance in accordance with Federal Acquisition Regulations.

Getting Started

AFI 63-124 directs the establishment of a customer-focused, multifunctional team called a Business Requirements Advisory Group (BRAG) to manage a service contract throughout the life of a requirement, and a large majority of the contracts in this study (some of them developed before the release of AFI 63-124) used formal BRAGs or equivalent teams. There was genuine enthusiasm for the effectiveness of these teams; they were said not only to have increased the efficiency of the process of contract development, but also to have helped team members develop a sense of collective “ownership” of the process.

Training

The contracts in this study were awarded from FY 1998 to FY 2000, with the most recent having been awarded in mid-FY 2000. Everyone we interviewed said that they had received insufficient training before being asked to implement PBSA practices. Although many had received basic briefings on different aspects of PBSA (writing statements of work [SOWs], for example) and some had received excellent assistance from MAJCOM headquarters, the majority opinion was that more training was needed earlier in the process. Most of those interviewed expressed a desire for “hands-on” training with detailed examples and step-by-step work through the development of a PBSA contract. SAF/AQC has begun efforts to improve training (and some new training programs were praised by the one person we interviewed who had recently attended), but those we interviewed also noted that basic training in the contracting career field does not yet address PBSA practices. Several interviewees also mentioned that training should be provided to functional representatives in addition to contracting personnel.

Market Research

Personnel we interviewed used a variety of methods in conducting market research, ranging from combing the Yellow Pages to conducting site visits at organizations that were using the services of interest. Although some found it difficult to find commercial firms that operated under circumstances similar enough to those of the Air Force to provide useful information, many were able to use their market research to aid in the development of the SOW and to provide insight into performance factors that should be considered in the solicitation.

Defining Requirements

In conferences and seminars, Air Force MAJCOM representatives have speculated that implementing PBSA practices would require waivers of many AFIs and the eventual revision of others. Because of these comments, it was surprising that, with only one exception, no mention was made in our interviews of formal MAJCOM guidance for PBSA implementation, and no bases revealed that they had to request waivers for any AFIs. At some bases, frustration was expressed that they would write SOWs in accordance with *perceived* MAJCOM guidance only to be directed to change what they had done because of changes in headquarters policy that had not been announced.

Air Education and Training Command (AETC) appears to have fairly strict guidelines for what level of service is allowable in grounds maintenance, custodial, and refuse/recycling

contracts. Bases that desire higher levels of service must pay for them by diverting funds from other sources. Although none of the AETC personnel we interviewed said this was a problem, it is easy to imagine scenarios in which the Air Force might not get "best value" if a base were faced with the choice of either paying out of its own pocket to get higher performance or settling on a poorer performer that just met the AETC standard.

SOW and Quality Assurance Surveillance Plan Development

The majority of the personnel we interviewed reported substantial decreases in the lengths of SOWs for their contracts, and review of the actual SOWs showed that many of these decreases had resulted from language changes that focused on *what* was to be accomplished rather than *how* to accomplish it. In only one case did it appear that the SOW was shorter because it made references to AFIs rather than quoting from them.

All the bases in the study reported a shift to customer complaint as the primary method of quality assurance, although some had implemented the approach more thoroughly than others. In fact, some quality assurance evaluators who claimed to rely on customer complaints still conducted 100 percent inspections.² Several people noted that the dependence on, and the level of, inspections rested on the nature of the service and vendor expertise and would be adjusted in the future if performance so warranted. Customer education about what constituted a valid complaint was also judged to be important.

An important and frequent comment from the field was that the shift to a customer complaint environment had contributed to a partnering rather than an adversarial relationship.

Contract Structure

All but three of the contracts in this study were firm fixed price (FFP). With few exceptions, these contracts were for terms of a basic period plus four option years. Award fees were the exception; only six of the contracts had them. However, reasons for not having award fees varied: Some bases did not have the money to provide them; some felt that such fees were inappropriate (in custodial contracts, for example, how can performance merit a fee by being "cleaner than clean"?); and others felt that the Air Force's use of past-performance information was sufficient motivation for a contractor to do a good job.

Most contracting officers said that they had not considered using an award term as an incentive in a contract, but one Air Combat Command (ACC) base was experimenting with the approach in an MFH maintenance contract.

Source Selection

The most popular forms of source selection were "best value" (9 of the 22 contracts) and the performance-price tradeoff (PPT) method (10 of the 22). A best value approach allows for the consideration of factors other than price in awarding a contract (e.g., past performance of the vendor and technical expertise) so that the contract may not necessarily be awarded to the lowest bidder. The PPT method is a simplified best value

²That is, performance is inspected or evaluated each time a task is accomplished.

approach that limits the evaluation factors to price and past performance. Air Mobility Command (AMC) appears to be encouraging the PPT approach more actively than the other commands.

Past Performance

All the personnel we interviewed were enthusiastic about the use of past-performance information in the source selection process. Some used "standard" questionnaires to gather the information but noted that in the future they would work to customize past-performance questionnaires to their specific needs. Most used follow-up telephone calls to clarify questions about past performance as well as informal Air Force contacts to gather more candid information. Several commented that it might be useful to develop a central database of past-performance information on contractors that have worked with the Air Force.

RESULTS OF PBSA IMPLEMENTATION

Effects on Performance

Those we interviewed were very happy with the performance of the vendors they had obtained using PBSA practices. However, not enough time has elapsed to allow for an objective evaluation of changes in performance because most of the contracts we discussed were relatively young—i.e., in force for approximately six months. Significantly, we saw no indication that base officials were formally comparing the performance of the current contractor with that of the previous contractor. For example, some officials told us that complaints were down under the new contractor, but they had not performed any analysis of the record of complaints for the previous contractor. Other bases required that the *contractor* keep metrics that could be reviewed by the base and thus relied on the contractor to track trends. Although this is an effective approach toward managing the current contract, it still does not help the Air Force measure improvement over previous contracts.

Surprisingly, at only two bases did personnel attribute their success in obtaining better contractor performance to the use of new acquisition practices and to the care they might have taken in reviewing past performance. Most commented that they were "lucky" to have found a good contractor.

Effects on Costs

Changes in costs resulting from PBSA practices were also difficult to determine because of the youth of the contracts, but three other factors made the determination even more complex. First, many of the new contracts are hard to compare to old contracts because the scope of work has changed. Second, it is difficult to determine the accuracy of government cost estimates that are a standard part of an acquisition. Third, it is difficult to measure changes in "internal" costs—i.e., those incurred in the preparation of a contract using new methods and those incurred in the management of a contract once it is complete. For example, there were obvious costs related to increased time spent on market research and learning how to write a performance-based SOW. Yet while many

of those interviewed alluded to these costs, their sense of them was highly impressionistic.

With respect to Air Force performance management costs, we expected that the new focus on customer complaints would lead to a reduction in quality assurance evaluator (QAE) manpower or workload and hence to a significant reduction in costs. But the comments from our interviews are ambiguous. Some bases found QAE workload to be increasing because of the expertise required to write new contracts using PBSA practices; others reported that they still have the same number of QAEs because they continue to do 100 percent inspections as they adjust to the use of customer complaints. Those who expected to transition from inspections to customer complaints as vendor performance warranted were unsure of the effect this would have on future demand for QAEs.

Attitudes Toward PBSA Practices

Customers, contracting officers, and vendors were generally satisfied with PBSA approaches to contracting. Those we interviewed said that customer complaints were down; contracting officers felt that the process was working as it should; and vendors appreciated being treated as part of a team. The attitudes of functionals, however, were mixed. Some favored the team environment encouraged by the cross-functional approach prescribed in AFI 63-124, but others were skeptical about performance-based SOWs that they felt gave them less control over the vendor.

Reactions to AFI 63-124 were also mixed. Some felt that the flexibility of this document gave them an opportunity to improve contracts; others felt that its ambiguity forced them to rely too much on other documents for guidance.

CONCLUSIONS

Practices That Seem to Work

Teamwork, market research, and the use of past-performance information are three practices that appear to be working well in the field. Teamwork helps encourage "buy-in" of PBSA practices by educating all participants about them and keeping everyone informed during the process of contract development. In the process of developing the SOW, teaming also helps the contracting office understand the real needs of the functional customer while helping the functional customer understand how the contracting office needs to structure the contract to make it performance based. Those who believed that working together helped meet the needs of the functional customer *and* give the Air Force better value were most pleased with the PBSA approach.

Market research is regarded positively by those we talked to in the field, and they seem pleased with the way it helped them apply commercial standards to their SOWs.

Everyone was pleased with the use of past-performance information in evaluating offerors despite the added workload it required. They asserted that the Air Force gets better value, and the knowledge that past-performance information is used provides incentive for vendors to perform well now in order to get new business in the future.

What Needs to Be Improved?

The first thing that needs to be improved is Air Force training in PBSA practices. Our interviews indicated that what is desired is training that provides

- A better understanding of how commercial firms do things.
- A hands-on explanation of how PBSA works in the Air Force setting, preferably illustrated with suitable case studies. The closer the case studies are to the services a base is about to buy, the better.
- A better understanding of where to turn to get the best and most up-to-date information on PBSA in the Air Force.

A second need in the field is better and more consistent guidance on the application of PBSA in the Air Force and better examples in AFIs that discuss the approach.

Finally, more attention needs to be paid to the collection of data on how PBSA is changing performance and costs associated with purchased services. The adoption of performance-based contracting methods is ultimately a way to help the Air Force accomplish its mission more efficiently and to obtain the best value for the American taxpayer, and the support of leadership at the base level is critical to the successful adoption of PBSA methods. Without data to show that PBSA is helping them do their job better, however, these leaders will be hard to win over. With good data, the Air Force will be able to continually improve the application of PBSA as it learns from accumulating experience.

LESSONS LEARNED

Appendix A, a key part of this document, synthesizes varied comments from our interviews into a set of lessons learned. We hope these lessons will be useful to those in the field who have not yet had the opportunity to apply PBSA practices.

ACKNOWLEDGMENTS

The material in this documented briefing is the responsibility of the authors, but we would like to acknowledge the many people who contributed their time and expertise to the project. First, we thank the contracting, quality assurance, and functional experts stationed at the 15 bases we contacted for agreeing to participate in telephone interviews that lasted as long as two hours. Their cooperation allowed us to get a real sense of how PBSA practices can be implemented in the field.

SAF/AQC was the sponsor of this research, and Colonel Mary Kringer, SAF/AQCO,¹ provided encouragement and support. Major "Skip" Solis, also of SAF/AQCO, provided the impetus for this work by sending out the initial e-mail inviting all MAJCOMs to share their "success stories" with others.

Our RAND colleague Laura Baldwin helped focus this research in the initial stages of the project and had several insights into results as the interviews were conducted. Ellen Pint made many useful suggestions to improve the presentation of the material.

We also wish to thank Tony Greene and Regina Wright for their assistance in revising this document and putting it in the proper format.

¹ SAF/AQCO was responsible for PBSA policy when this research was conducted. PBSA policy is now managed by the office of Air Force Contracting Policy (SAF/AQCP).

ACRONYMS

ACC	Air Combat Command
AETC	Air Education and Training Command
AFCESA	Air Force Civil Engineer Support Agency
AFFAR	Air Force Federal Acquisition Regulation
AFI	Air Force Instruction
AFLMA/LGC	Air Force Logistics Management Agency Contracting Division
AFM	Air Force Manual
AFMC	Air Force Materiel Command
AFSPC	Air Force Space Command
AMC	Air Mobility Command
ASP	Acquisition Strategy Panel
AST	Acquisition Support Team
BOMA	Building Owners and Managers Association
BRAG	Business Requirements Advisory Group
CE	Civil engineering
CEIO	Civil Engineering, Organization, and Privatization
DoD	Department of Defense
EPS	Electronic posting system
FAC	Federal Acquisition Circular
FAR	Federal Acquisition Regulation
FFP	Firm fixed price
IDIQ	Indefinite delivery, indefinite quantity
ISO	International Organization for Standardization
LPTA	Lowest Price Technically Acceptable
MAJCOM	Major Command
MFH	Military family housing
O&M	Operations and maintenance
OFPP	Office of Federal Procurement Policy
PBSA	Performance-based services acquisition
PBSC	Performance-based services contracting

PGMS	Professional Grounds Maintenance Society
PPT	Performance-price tradeoff
QAE	Quality assurance evaluator, quality assurance evaluation
QASP	Quality Assurance Surveillance Plan
SAF/AQ	Office of the Assistant Secretary of the Air Force for Acquisition
SAF/AQC	Office of the Deputy Assistant Secretary of the Air Force (Contracting)
SAF/AQCO	Air Force Office of Operational Contracting
SOW	Statement of work
SV	Services
USAFE	United States Air Forces, Europe
USD/A&T	Under Secretary of Defense for Acquisition and Technology

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INTRODUCTION

The Office of the Secretary of Defense has established an aggressive policy that seeks to implement performance-based services acquisition (PBSA) on a broad scale. The Air Force is pursuing an even more aggressive implementation program. This document seeks to support continuing implementation by identifying Air Force bases that have succeeded in implementing PBSA in specific contracts, describing the details of how they did this, and then developing lessons learned that the remainder of the Air Force can use to build on progress made to date.

The work draws on detailed, structured interviews with relevant contracting and functional personnel at 15 bases responsible for 22 performance-based contracts awarded between FY 1998 and FY 2000. The contracts focus on the activities of greatest day-to-day importance to operational contracting: military family housing (MFH) maintenance, grounds maintenance, custodial services, food services, and refuse services.

What a Performance-Based Contract Is

- Describes requirements in terms of results required rather than methods of performance
- Uses measurable performance standards (i.e., terms of quality, timeliness, quantity, etc.) and quality assurance surveillance plans
- Uses procedures to reduce price when services are not performed or do not meet contract requirements
- Uses performance incentives where appropriate

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The use of performance-based services contracts is fairly new to the Department of Defense (DoD), but Federal Acquisition Regulations (FARs) have recognized this form of contracting for a long time. FAR Part 37 defines a performance-based contract in the following terms:

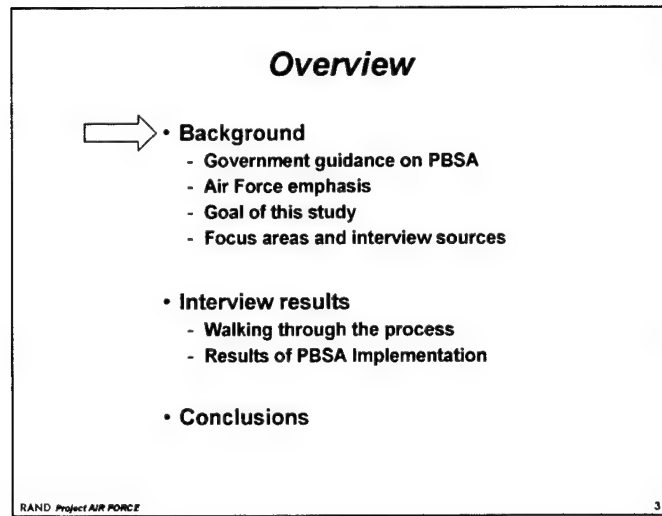
- The buyer tells the seller what the buyer wants done, not how to do it. This is often a subtle distinction, but it points to an important division of labor. The buyer focuses on translating its strategic needs into a clear statement of how each service it buys relates to those strategic needs. The seller focuses in turn on finding the best way to fulfill the buyer's needs for each service in question. Another way to make this distinction is the following: The buyer steers; the seller rows.¹
- The buyer states what it wants in clear terms that make measurement as simple as possible. The more objective and quantitative the terms of the agreement, the better. That said, softer, more qualitative terms should not be neglected if they are important to performance. The buyer should, however, seek to state these terms in simple ways that will not lead to confusion. Once the terms are stated, a performance-based contract calls for a formal quality assurance program to monitor these terms on an ongoing basis.
- The buyer links the terms of the agreement to formal incentives. The FAR emphasizes penalties for nonperformance that take the form of deductions from the price set for the service. However, DoD has agreed with the Air Force that reperformance—timely, satisfactory completion of a task at the provider's expense—is an acceptable substitute for deductions. Where appropriate, the buyer can use positive incentives such as an award fee or a contract extension (award term) to reward a seller for excellent service.

¹David Osborne and Ted Gaebler, *Reinventing Government*, Reading, MA: Addison-Wesley, 1992.

PBSA takes a broader view of the cross-functional context in which the Air Force makes use of performance-based services contracts. This broader view is still fairly new to the Air Force.² Our analysis drove home the point that the contracting office cannot create successful performance-based services contracts by itself. Ultimate customers, relevant functions, and other support activities must get involved to ensure success.³ In this presentation, we always take this broader perspective.

²PBSA and performance-based services contracting (PBSC) are terms that are used interchangeably in Air Force documents to refer to the practice of writing acquisition contracts that meet the FAR Part 37 criteria for a performance-based contract. Air Force training materials for PBSA, however, include discussions of broader topics, including training, market research, and best value source selection. We could say that PBSC is about writing a performance-based contract; whereas PBSA is about acquiring services with a performance-based contract. PBSA requires the active participation of many professionals outside the contracting community and includes some practices in addition to writing a performance-based contract.

³Commercial-style PBSA always distinguishes "customers" from "functionals." In the Air Force context, commercial users of PBSA would refer to war fighters and military families as the ultimate customers and to organizations like civil engineering (CE) and services (SV) as functionals. PBSA in the Air Force does not emphasize such a distinction. In Air Force PBSA, CE and SV can be treated as the customers who determine whether a contractor is performing appropriately. This document uses customers in both ways, relying on the context to make the distinction clear. If uncertain, assume that the Air Force view holds.



BACKGROUND

This documented briefing focuses on recent Air Force experience with PBSA. It starts with a brief discussion of background information relevant to this experience, but the body of the briefing focuses on what we learned through our interviews. The briefing closes with a brief discussion of implications for PBSA elsewhere in the Air Force.

Our findings remain tentative at this point. As we present this material to other organizations, we are looking for additional insights. We are especially interested in determining whether the findings reported here are compatible with perceptions held elsewhere in the Air Force. We are also interested in ascertaining which of the lessons learned will be most useful to report to a broader Air Force audience.

PBSA Is Endorsed by the Government and the Air Force

- **Government interest**
 - 1991 OFPP memo stressed use of PBSC
 - FAR changes made in 1997
 - PBSA goals established by USD/A&T
- **Air Force emphasis**
 - AFI 63-124 describes AF approach to PBSC
 - “Lightning Bolts” address some PBSC issues
 - Some command publications assist implementation

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In April 1991, the Office of Federal Procurement Policy (OFPP) issued Policy Letter 91-2, which stated that it was the policy of the federal government that agencies use performance-based contracting methods to the maximum extent practicable when acquiring services. This meant “structuring all aspects of an acquisition around the purpose of the work to be performed as opposed to either the manner by which the work is to be performed or broad and imprecise statements of work.” The Under Secretary of Defense for Acquisition and Technology (USD/A&T) reaffirmed this policy in April 2000 by directing that 50 percent of service acquisitions, measured both in dollars and in actions, be performance based by the year 2005.⁴

The principles outlined in OFPP Policy Letter 91-2 were formally incorporated into the FARs in 1997.⁵ Other changes in the FARs since then have emphasized the importance of using market research, past-performance information as an element of proposal evaluation, a “best value” continuum that allows for the consideration of factors other than price in a source selection, and practices and quality assurance plans that relate performance to incentives.⁶

A variety of Air Force instructions (AFIs), publications, and policies direct or encourage the use of performance-based contracting practices. AFI 63-124, *Performance-Based*

⁴Each service was directed to develop a plan to implement this policy. The Office of the Deputy Assistant Secretary of the Air Force for Contracting (SAF/AQC) released the Air Force’s *Performance-Based Services Acquisition (PBSA) Implementation Plan* in June 2000. The plan can be accessed at the Air Force contracting website: <http://www.safaq.hq.af.mil/contracting/toolkit/part37/>.

⁵Federal Acquisition Circular (FAC) 97-01, August 22, 1998. FACs are most easily referenced through the Air Force FARSite website at <http://farsite.hill.af.mil/>.

⁶According to FAR Part 2.101, “‘Best value’ means the expected outcome of an acquisition that, in the Government’s estimation, provides the greatest overall benefit in response” to the requirement. For practices related to PBSA, see FAR Part 12, “Acquisition of Commercial Items”; FAR Part 15, “Contracting by Negotiation”; FAR Part 16, “Types of Contracts”; and FAR Part 37, “Service Contracting.” (FARs are also most easily referenced through the FARSite website given above.)

Service Contracts, outlines headquarters, major command (MAJCOM), and installation responsibilities in structuring acquisition around what, as opposed to how, a contractor should perform its work. Acquisition policy initiatives called "Lightning Bolts," issued by the Assistant Secretary of the Air Force for Acquisition (SAF/AQ), have addressed some PBSA issues, such as the use of Acquisition Support Teams (ASTs) to implement performance-based concepts during acquisition strategy development. Finally, individual MAJCOM documents, such as Air Mobility Command's *Performance-Price Tradeoff Guide*, are available to assist contracting offices in applying new or unfamiliar techniques to the acquisition process.⁷

⁷See Headquarters Air Mobility Command, Logistics Directorate, Contracting (HQ AMC/LGC), *Performance-Price Tradeoff (PPT) Guide*, June 2000.

***Study Seeks Information on
Successful Implementations to Date***

- **Primary goal**
 - Identify examples of early success in implementation
 - Use them to find lessons learned on how to pursue PBSA successfully elsewhere—"build on success"
 - Not a systematic evaluation of current practices
- **Secondary outcome: "reality check"**
 - What is being done differently under these contracts?
 - What benefits and costs can be measured?
 - How is AFI 63-124 being implemented?
 - How adequate is current guidance and training?

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The primary goal of this study is to use examples of successful Air Force applications of PBSA to illustrate how to pursue these practices elsewhere. It is decidedly *not* designed to be, nor is it, a systematic evaluation or critique of PBSA in the Air Force. A secondary outcome is to provide a "reality check" of the current status of implementation of PBSA practices to help determine what is being done differently under PBSA, how the costs and benefits of new practices are being measured, how AFI 63-124 is being implemented, and how people in the field judge the adequacy of their training to use a PBSA approach.

Study Focuses on Key Aspects of Innovative Services Acquisition

- **Training**
- **Market research**
- **Best value source selection**
- **Outcome-oriented SOWs**
- **Incentives tied to outcome-oriented performance**
- **Performance management plans**

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In keeping with the practices described in policy guidance letters, the FARs, and Air Force publications, the telephone interviews that we conducted for the study focused on six areas:

- The availability and effectiveness of training in PBSA practices. Training is required before anything else can occur.
- Techniques used in, and the effectiveness of, market research. Market research identifies commercial practices and processes that help the Air Force understand how to define and monitor performance, choose the best source to provide such performance, write contracts, and provide incentives.
- The design of best value source selection policies and practices to select sources that the Air Force trusts to perform well with regard to its statements of work (SOWs), terms, conditions, and performance management plans. DoD views best value source selection as separate from PBSA.
- The use of outcome-oriented SOWs that include measurable performance objectives tailored to meet the needs of the customer organization(s).
- Other contract terms and conditions tailored to the relevant services and the needs of the customer organization(s), including incentives that are tied to the outcome-oriented performance objectives to promote improvement over time.
- The development of performance management plans that are tied to outcome-oriented performance objectives, including effective use of customer satisfaction ratings in managing provider performance.

Study Examines 22 Recent Base Service Contracts on 15 Bases

	MFH	Grounds Maintenance	Custodial	Food	Refuse	Other
ACC	1					
AETC	1	3	2		1	1
AFSPC						1
AMC	2	2	2	2		3
USAFE			1			

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We talked to personnel at 15 Air Force bases in five commands—Air Combat Command (ACC), Air Education and Training Command (AETC), Air Force Space Command (AFSPC), Air Mobility Command (AMC), and U.S. Air Forces, Europe (USAFE)—and discussed 22 contracts using the questionnaire template shown in Appendix B.⁸ AETC and AMC were heavily represented in our interviews. As shown in the chart above, most of the contracts are related to MFH maintenance, grounds maintenance, custodial services, food services, and refuse/recycling. The “other” category includes some small contracts for special services as well as a large contract for base operating services. The base operating services contract was a planned A-76 study that resulted in a direct conversion.⁹

Except for the USAFE custodial contract and the “other” contracts, all contracts were either small-business or 8(a) set-asides.¹⁰ The only unrestricted contracts were either for

⁸Appendix C lists contracts by type and shows the positions of interview participants. The contract administrator and an appropriate functional representative (e.g., someone from civil engineering or the housing office) were usually involved in the discussion. Participants were advised that all answers to questions would be considered confidential; specific information in this report associating individual contracts with locations has been included only with the permission of the survey participant.

⁹A-76 refers to Office of Management and Budget Circular A-76, which prescribes a specific (and lengthy) cost comparison process to determine if a commercial activity currently being accomplished by employees of the government should be outsourced to a civilian contractor. Under certain circumstances, a “direct conversion” can be accomplished, which means that the conversion to a civilian contractor is made without going through the A-76 process. According to those we interviewed, the direct conversion was justified by arguing that the base had insufficient personnel to conduct the A-76 study and maintain base functions at the same time. Even with the direct conversion, however, the process involved a best value competition among 8(a) contractors.

¹⁰Small-business set-asides are procurements that are reserved exclusively for small businesses and are authorized in certain circumstances by the Small Business Act. One of several restrictions to qualify as a small business in the services field is that annual receipts may not exceed \$2.5 to \$21.5 million, depending on the service being provided. So-called 8(a) set-asides (named for the paragraph in the Small Business

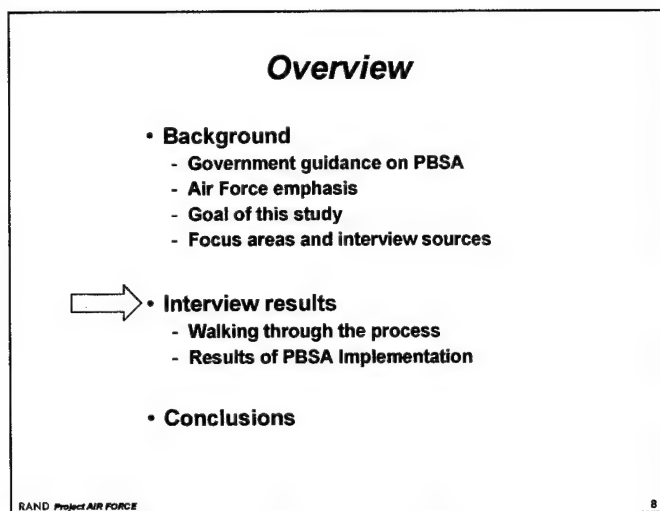
technically advanced equipment or, in the USAFE case, for services outside the United States. It is unclear to us if this is a significant fact related to the general population of suppliers for these services or to the use of best value approaches.

Two contracts were awarded in FY 1998, five in FY 1999, and fourteen in FY 2000 (eight of those were in November–December 1999). The USAFE contract has not yet been awarded.

The participants in our interviews were self-selected. The Air Force Office of Operational Contracting (SAF/AQCO) sent an e-mail to all contracting offices in March 2000 asking for examples of “success stories” of performance-based services contracts, and those who responded did so on the basis of their own perception that they were successful.¹¹ From the group of respondents, we selected those that covered large contracts (such as MFH) and that allowed us to examine similar services in different MAJCOMs, as well as several additional examples that promised some insight into unusual situations.

Act that governs them) are designed for small businesses owned and controlled by socially or economically disadvantaged individuals.

¹¹The e-mail asked for the following information: dollar savings resulting from the conversion to performance-based requirements, improved contractor performance, reduction in SOW pages, use of commercial standards and best practices, innovative contractor initiatives, increased customer satisfaction, reduced need for contract modifications, and reduction in the amount of surveillance required. It also invited comments about problems encountered with performance-based contracts.



INTERVIEW RESULTS

Let us now turn to the results themselves.

Walking Through the Process

- **Motivation for implementing PBSA**
- **Getting started**
 - BRAG
 - Training
 - Market research
 - Defining requirements
- **The contract**
 - SOW development
 - Quality Assurance Surveillance Plan (QASP) development
 - Contract structure
 - Source selection process
 - Past performance data

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Our interviews were structured around the process for implementing performance-based service contracts, and the discussion that follows divides this process into two phases. The “getting started” phase includes the establishment of a multifunctional team (called a Business Requirements Advisory Group [BRAG] in AFI 63-124) to guide the whole process, training personnel in PBSA techniques, organizing market research, and finalizing the requirements for the desired service. The “contract phase” in our discussion starts with development of the SOW and the Quality Assurance Surveillance Plan (QASP) to describe the nature of the work required and how performance will be assessed. The type of contract to be used and the nature of the competition for the contract are determined before the solicitation, and the use of past-performance data is important in the award of the contract. Many of the individual steps of the process listed in this chart overlap; the order of discussion is for convenience only and is not meant to imply a chronological sequence.

Motivation for Implementing PBSA Varied

- **Headquarters had an important role**
 - ACC and USAFE bases were directed to use PBSA
 - Three from AMC, two from AETC noted HQ directives
- **Prior experience affected attitudes**
 - Three from AMC and two from AETC were dissatisfied with previous contractors
 - One from AETC thought “timing was right” for PBSA
- **Individual initiative was also important**

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The majority of those we talked to said that they used performance-based practices because they had been directed to do so by higher headquarters or because of the release of AFI 63-124. However, several people in the commands that were “pushing” PBSA emphasized that their dissatisfaction with the performance of previous contractors had led them to consider using a different approach for awarding contracts. They hinted that they would have tried something new even without headquarters direction because of their unhappiness with lowest bidders.

Work on the “oldest” contract we discussed in our interviews was started in early 1998. Because the contract needed to be awarded in a very short time in order to meet a critical need, the contract manager was encouraged to “push the boundaries” of the FARs to complete the process quickly. The manager responded creatively and applied performance-based practices effectively without explicit MAJCOM guidance.

Multifunctional Teams Helped People Get Started

- Multifunctional teams were used by most bases
 - Membership on teams varied
 - Frequency of meetings varied widely
 - “Formal” BRAGs were not the only approach
- Teams were effective
 - Teamwork increased efficiency
 - Teams contributed to sense of collective “ownership”

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A Business Requirements Advisory Group must be established for every requirement that operates under AFI 63-124. A BRAG is a “customer-focused, multifunctional team” that manages a service contract throughout the life of the requirement and supports best value business decisions, acquisition planning, market research, source selection, and contract performance management. Those involved with 10 of our 22 contracts said that they used a “formal” BRAG. Five said they had equivalent groups (most for contracts developed before AFI 63-124 was released); one said that its Acquisition Strategy Panel (ASP) served as the BRAG.¹²

People we interviewed did not always provide specific information on the membership of the group; in general, they noted that the contracting office and the primary functional area were always represented. Legal, financial, and quality assurance evaluation (QAE) personnel were also represented. Participation by higher-ranking personnel (e.g., the commander of the contracting squadron) was rare; as one person said, “It’s hard to get face time with the squadron commander.” Although AFI 63-124 says that installation commanders are to provide the resources necessary for BRAGs to carry out their duties, personnel at one base noted their concern that BRAGs could present a problem if the base is low on manpower, since people have to do their own jobs in addition to working on a BRAG.

Meeting frequency varied widely. The general attitude was that teams met “as needed.” At one base, people said they expected the “full BRAG” to meet only annually to satisfy their interpretation of the AFI. At another, the BRAG met eight hours a day for a week to develop a SOW.

Although there was occasional cynicism about the BRAG (we heard remarks such as “It’s just a name change,” “We filled the square,” and “It ended up looking like meetings

¹²ASPs are used to “develop a systematic and disciplined approach to achieve an efficient/effective acquisition.” Air Force FAR supplement (AFFAR) 5307.104-91 describes when they are used and how to conduct them.

under the previous style of contracting”), there was genuine enthusiasm for the effectiveness of a cross-functional team, whether it is called a BRAG or something else. At one AMC base, the BRAG cut the time required for many activities in half, because information related to the contract was shared in real time rather than in written memoranda, and at an AETC base the BRAG limited the time wasted going back and forth between different offices. Personnel at a third base noted that the BRAG helped the contracting office better understand the functional customer’s needs—in fact, it helped them in their market research for the contract.

Effective teamwork and the feeling of “ownership” of the process were noted several times. The BRAG helps the contracting office and the functional customer feel that everyone is working together to ensure that problems are being solved. Problems associated with acquiring services are no longer just “contracting’s job” or “contracting’s fault.”

Ineffective Training Made Implementation More Difficult

- **Limited availability was an issue**
 - Many bases had no training
 - Training was often limited to single-day awareness courses
- **Available training was often ineffective**

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Those contracts we examined were developed when the push for PBSA was new, so difficulties with training for the approach might be expected. However, general frustration was expressed with the *lack* of training provided before contracts using PBSA were required.

Personnel at five bases representing AMC and AETC said they had no training at all—and one of the contracts involved was awarded as late as January 2000. Those who said they had at least some training generally referred to assistance from headquarters or some on-site awareness training. Headquarters ACC conducted a performance-price tradeoff (PPT) workshop at the ACC base, and a private firm was contracted to teach a PPT course for personnel at one of the AMC bases. It is encouraging to note that personnel at three bases (two from AMC and one from USAFE) that have awarded contracts since January 2000 reported having received more useful training, so the situation is better than it was. However, even these people saw room for improvement in training programs.

The biggest complaints were that training was too short (one day) or was ineffective because it provided an overview of PBSA practices instead of a detailed discussion of how to apply those practices. Videotapes were considered boring; a CD-ROM produced by the Air Force Civil Engineer Support Agency (AFCESA), however, was judged to be very good by the AMC base that received it.

We will return to this topic at the close of the briefing to suggest changes that could improve Air Force training on PBSA.

Approaches to Market Research Varied

- **Different methods were used**
 - Media range from Yellow Pages to the Internet
 - Telephone and mail surveys had limited success
 - Site visits to commercial firms were useful
- **Who should do it is a matter of discussion**
 - Contracting personnel seemed to do most of it
 - Cooperation of functionals, “customers” necessary
- **The time to accomplish it varies**
- **It’s a continuous process**

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A wide variety of approaches was used in market research, ranging from thumbing through the Yellow Pages to conducting structured interviews to engaging in site visits to commercial firms with similar service needs.

Personnel at several bases mentioned that they had had little success gathering information by sending questionnaires to commercial buyers or providers. Large providers in particular were not interested in providing assistance unless they had previous experience with Air Force contracts. In one case, a provider expected to be paid for answering questions in the market research phase.

Those who had visited commercial firms that bought the services in question seemed to be most satisfied with the cooperation they received, and for the most part searches of the web were successful and productive. In at least two cases (one MFH and one custodial), the contracting office had found it difficult to locate commercial buyers whose experience included services of the size and scope needed by the base.

Experience with government and Air Force websites as sources of information or advice for market research varied, and there was not an obvious “maturing” of the users or the websites over time. For example, those who developed an AETC contract awarded in early 1998 found a web search valuable, but another AETC group working in mid-1999 found most web information out of date (although they did find the Air Force Materiel Command [AFMC] website useful). People at one AMC base had a positive experience with the web in developing a food services contract in mid-1999, but a group developing an MFH contract at another AMC base a few months later found even the AMC website of limited usefulness.

Despite occasional dissatisfaction with electronic media, there was general agreement that *informal* Air Force networks were helpful for exchanging information.

In most of our discussions, it was clear that the contracting squadron was the office primarily responsible for conducting market research. At only two bases did those we

interviewed specifically note that this was a problem or indicate some resentment, but a comment from one base is worth quoting in full:

Make sure that the functional customer and contracting work together in performing the market research. Market research is the key to the whole thing—without it, there is no basis for the SOW...CE must be drawn in, even if it is reluctant. Contracting and the functional have very different questions to ask in market research. Both need to participate to make a questionnaire complete.

The time required to accomplish market research (for those who were specific about times) varied widely: One grounds maintenance group took three weeks to do it; another took four to five months.

There were three highly encouraging things to note about market research:

- First, even those who complained about the lack of guidance available in this area had little difficulty accomplishing the research successfully. Everyone took the initiative to explore a variety of sources to get information that they found useful for developing the contract.
- Second, those who took a lot of time to conduct their research attributed their “slowness” to lack of experience and felt that the process would be much simpler with the next contract they worked with.
- Finally, personnel at several bases mentioned that market research was a continuing process (one said “never ending”)—especially continuing through contract development. The contracting office at one base compiles a market research document that users consider to be a “living” document.

Guidance on Defining Requirements Was Limited

- Few bases mentioned guidance in the form of MAJCOM instructions
 - Earlier work led us to believe that PBSA might require waivers or adjustments to other AFIs
- MAJCOM guidance in one case seems to go against the “spirit” of PBSA implementation

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Our earlier research, as well as our interactions with officers involved with contracting, had led us to believe that full implementation of PBSA might require broad changes to AFIs and other formal Air Force documents. For example, in a briefing presented at the annual CE/Contracting/Industry Partnering workshop in February 2000, an AFMC representative said that AFI 63-124 wasn't as easy to use as many had thought it would be.¹³ This individual suggested that when a base tries to apply commercial standards to a contract, the Air Force needs to provide more guidance on which AFIs can be waived and which ones are mandatory. During discussion of this issue, some participants said that AFIs were themselves flexible enough to allow PBSA practices without requiring waivers. Others believed that many AFIs needed to be rewritten to reflect commercial standards, and one participant recommended that *all* AFIs related to service standards should be eliminated. Similar views were evident in early discussions of the Pick-a-Base program in AETC, which, among other things, takes an aggressive approach toward PBSA.¹⁴

Although these discussions have been in the context of A-76 studies, it is clear that there has been disagreement about the flexibility that is allowed when performance-based requirements are defined. In light of this disagreement, it was striking to us that with the exception of one MAJCOM, no mention was made of formal, written command guidance

¹³R. O. Butler, AFMC/CEIO (Civil Engineering, Organization, and Privatization), “AFMC Lessons Learned,” briefing presented at the annual CE/Contracting /Industry Partnering workshop at Tyndall Air Force Base, Florida, on February 23–24, 2000.

¹⁴The AETC Pick-a-Base strategy is an approach toward incorporating multiple support functions at one base into one A-76 study. It is designed to “maximize cross-functional synergy” and to encourage innovation. According to an AETC information paper by Lieutenant Colonel Randy Coleman, “Basically, Pick-a-Base endeavors to consolidate base operating support into as few contracts or Most Efficient Organizations as feasible.” See Randy Coleman, “Pick-a-Base: An Alternative Approach to CS&P,” Air Education and Training Command, April 30, 1999, available at [http://public.afca.scott.af.mil/public/99 May/may08.htm](http://public.afca.scott.af.mil/public/99%20May/may08.htm).

related to PBSA implementation, and there were no requests for AFI waivers for any of the 22 contracts we discussed.

The contracting office at one AMC base complained specifically about a lack of formal guidance for a contract solicited in mid-1999 and awarded in early 2000: "We developed our PBSCs to [meet] the new Air Force Civil Engineer Support Agency standards. When we sent them to AMC headquarters for review, they applied different standards, which they had not written down and shared at the time."

AETC was the exception to the lack of formal guidance, with published (and fairly strict) standards for what level of service is allowable in grounds maintenance, custodial, and refuse/recycling contracts. AETC headquarters tells bases that they can buy only the minimum level of service required to meet government goals, and that it will review large contracts to verify compliance. A base that seeks to establish higher standards must pay for them by diverting discretionary funds that could be used elsewhere. One base that receives frequent visits by distinguished visitors pays for extra grounds maintenance work during those visits—and during special events—with its own operations and maintenance (O&M) money. Another base wanted roadside trash collection done several times a week, but the AETC standard called for collection once every two weeks. The base was unwilling (or unable) to use discretionary funds for more frequent service. Another base did not combine refuse and recycling services because AETC standards would not allow it.

We asked personnel at one base if it was possible to reconcile AETC's establishment of minimum requirements for which it would pay with contract offers that went beyond the minimum. We were assured that this was not a problem and were informed that a contractor could still get a "blue" rating in this case.¹⁵ However, the *potential* for conflict between PBSA implementation and strict "minimal" standards seems clear. A contractor that could take advantage of economies of scope by combining refuse and recycling is apparently unable to offer to do so at an AETC base; both the Air Force and the contractor lose in this case. It is also easy to imagine a scenario in which one contractor offers to perform well above the AETC standard at a slightly higher price than a contractor that just meets the minimum standard. The Air Force might not get "best value" if a base is faced with the choice of either paying out of its own pocket to get the higher performance or settling on the poorer performer that just meets the AETC standard.

¹⁵In Air Force evaluations, technical aspects of a proposal are granted a color rating of blue, green, yellow, or red. A blue rating means that the proposal "exceeds minimum performance or capability requirements in a way beneficial to the Air Force." This is described in AFFAR 53-15, paragraph 5315.305.

SOW Development Was More Difficult but Was Worth the Effort

- **New SOWs required more work**
 - New approaches to writing them are needed
- **Reduction in SOW length can be substantial**
 - Some had huge reductions—hundreds of pages
- **Several factors led to reductions**
 - SOW language emphasized “what” instead of “how to”
 - Formerly required “boilerplate” was reduced
 - References to commercial practices increased

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Most of those we interviewed said that performance-based SOWs took more time to develop because the writers were inexperienced and there were few examples available to work from. People at one base said, “We used to have a boilerplate SOW, give it to the functional customer, and go back and forth a couple of times. Now...we work together to do the market research, which dictates the contents of the SOW.” Without the boilerplate, writing from scratch was sometimes difficult—especially because functional customers (particularly QAEs) were forced to “rethink” their approach to writing the SOW, and there was discomfort with the lack of direction to the contractor on *how* to do things. However, this experience was not universal; personnel at some bases thought that writing their performance-based SOWs was less difficult because the task was done in the context of a BRAG, where communication and cooperation were easier.

Although most interviewees said their job was made more difficult by the lack of sample performance-based SOWs, some said they were able to build on the work of other bases in their command. Others noted that they received assistance from command headquarters, but this did not always make the job easier because shifting command perspectives resulted in an iterative process to create an acceptable document.

The results of writing performance-based SOWs were in some cases remarkable. One MFH SOW was reduced from over 300 pages to just under 40, and several other bases cut more than 100 pages from their SOWs. People at virtually every base said that their SOWs now emphasize the outcome desired without going into details of how to do it, adding that their SOWs are also shorter because they eliminate needless definitions by referencing commercial standards. A review of several of these contracts confirmed that these assessments are accurate; reductions are not simply a result of AFI 63-124 allowing references to other AFIs instead of “boilerplate” language.

The Professional Grounds Maintenance Society (PGMS) and the American Society of Landscape Architects provide common grounds maintenance standards, and several bases referenced the Building Owners and Managers Association (BOMA) for custodial

services standards. One grounds maintenance example of the “old” way of stating requirements in the SOW is “Use a mulching mower set to no more than four inches on Monday and Thursday; trim on the same day as mowing.” The current SOW says only “Mow improved areas using PGMS standards.”

Market research revealed that in certain places, commercial firms tended to use standards more attuned to the locale. For example, one grounds maintenance contract reflected input from a local agricultural extension service office.

Customer Complaints Were More Important in QASPs

- Few explicit applications of commercial standards
- Focus on customer complaints
 - Transitioning from inspections to full reliance on complaints will take some time
- Intentional shift of responsibilities to the vendor
- PBSC approach adds sense of partnership, improves communication

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In our interviews, few explicit comments were made about applying commercial standards/approaches to QASPs, although there were occasional remarks to the effect that customer complaints were the primary method of quality control in the commercial world. Personnel at one base said that in their research they had asked specific questions about how the commercial world does everything—payments, inspections, evaluation factors—and in the process had discovered a commercial software tool that will be useful in their quality control plan.

All of the contracts we discussed in our interviews have shifted the focus of their quality assurance programs from regular inspections by QAEs to reliance on customer complaints¹⁶—although the new focus is not always that sharp. A few seemed somewhat inconsistent in our discussions; they would say that they rely on customer complaints but would then talk about using 100 percent inspections,¹⁷ so it was not clear what they were actually using. Invalid customer complaints were an issue as well, and all bases mentioned the importance of customer education to ensure understanding of vendor obligations under the contract. We heard repeatedly of transitional periods early in contracts during which Air Force personnel complained about things not covered in the contract, but after customer/functional training was accomplished, the ratio of valid complaints to the total number of complaints rose markedly. It appears that proactive training eliminated this transitional experience, and the importance of such training was recognized. For example, a custodial QASP we received outlined training for building managers that included discussions about the requirements of the contract, how to make a

¹⁶Again, commercial firms and the Air Force tend to think about “customers” differently. In the Air Force, the “customers” empowered to complain are sometimes the ultimate customers—i.e., the actual users of the services bought—and are sometimes the Air Force functionals responsible for day-to-day oversight. Commercial firms tend to focus much more on customers who actually consume a service bought from an external source.

¹⁷This means that each time work is performed, it is evaluated or inspected.

complaint, and whom to contact in the government in the event that a complaint was not resolved.

AFI 63-124 allows methods of surveillance to be adjusted after contract award, and the ACC base has explicitly implemented this approach: Although its QAEs now do 100 percent inspections, the QASP states that this approach can be modified on the basis of contractor performance with the hope of eventually relying on customer complaints alone. Evaluators at other bases noted that the dependence on inspections, as well as the frequency of inspections, varied with vendor experience and with the nature of the contract (e.g., some environmental and health-related areas might always require 100 percent inspection).

Personnel at five bases specifically mentioned shifting the burden of compliance/quality control to the contractor in order to reduce surveillance costs, and we got the sense from the other bases that this was their attitude as well. One AMC base has a custodial contractor that is ISO 9000 compliant (certified as ISO 9002).¹⁸ This certification requires that the vendor undergo unannounced audits as well as semiannual inspections. This “external” third-party quality control reduces the monitoring burden for the base.

An important, and frequent, comment from the field was that the shift from “oversight” to “insight” through customer complaints contributes to a partnering, rather than an adversarial, relationship.¹⁹ We heard remarks such as “Now CE can talk directly to the contractor...[to] get a solution”; “The contractor wants to do the right thing”; and “In the past, contracting might communicate by formal letter; now they will use informal telephone calls.”

¹⁸The International Organization for Standardization (ISO) is a worldwide federation of national standards bodies from some 130 countries. According to the organization, “The ISO 9000 family of standards represents an international consensus on good management practices with the aim of ensuring that the organization can time and time again deliver the product or services that meet the client’s quality requirements. These good practices have been distilled into a set of standardized requirements for a quality management system, regardless of what your organization does, its size, or whether it’s in the private, or public sector.” See the ISO website, <http://www.iso.ch>, for details.

¹⁹In a PBSA training briefing by the Air Force Logistics Management Agency Contracting Division (AFLMA/LGC), the difference is described in this manner: “Oversight usually meant [that] the customer, or QAE, aimed inspections at detecting if there’s a problem; in other words we kept an eye on the contractor. Now, we’re asking our QA personnel to review contractor metrics. That is, review the metrics with an understanding and validating role to monitor the contractor’s quality surveillance system. The QA person is not reviewing for performance; he or she is reviewing for good management. We are no longer targeting the process as the primary focus; we are targeting results.”

Most Contracts Were FFP and of "Standard" Duration

- **Contract types limited**
 - All but three are firm fixed price (FFP)
- **Terms**
 - Contracts with a basic period plus four option years predominate

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All but three of the contracts in this study are firm fixed price (FFP). The refuse contract is fixed price plus economic price adjustment because of anticipated increases in the landfill fee (the landfill is operated by the local municipality). Because of the large work scope and expected changes in base activities, the AFSPC base decided on a cost contract. One base used an indefinite-delivery, indefinite-quantity (IDIQ) contract for a varying staffing requirement.²⁰

Contract terms with a basic period plus four option years predominated,²¹ with two interesting exceptions. The refuse contract required the purchase of new equipment, and the base extended the contract period for two years in order to allow the vendor to amortize the capital improvement costs over a longer period.

One AETC custodial contract was slightly unusual as well. The previous contractor was terminated for poor performance after a year and a half. The current contract uses five six-month options to allow for integration into a forthcoming A-76 study.

²⁰ An FFP contract provides a price that is not subject to adjustment on the basis of the contractor's cost experience in performing the contract. A fixed-price contract with economic adjustment provides for revisions of the stated contract price in the event of specified contingencies. A cost contract provides for the payment of allowable incurred costs as prescribed in the contract. IDIQ contracts allow for flexibility in the quantity and timing of services delivered. FAR Part 12.207 says that agencies shall use FFP or fixed price with economic adjustment in contracts for the acquisition of "commercial" items. IDIQ may be used where the prices are established on the basis of an FFP or fixed price with economic price adjustment, adding that "use of any other contract type to acquire commercial items is prohibited." FAR Part 37.602-4 says, "Contract types most likely to motivate contractors to perform at optimal levels shall be chosen."

²¹ Service contracts are structured with a "basic period" and "option years" because continuation of a contract is subject to appropriations from Congress. FAR Part 17.204(e) discusses the usual standard of one basic year plus four option years. It is generally understood that the contract will continue in the option years unless the contractor performs unsatisfactorily. Later we will address award terms, which reward a contractor for excellent performance by extending the originally negotiated length of the contract.

Limited Use of Award Fees/Terms^a

	MFH	Grounds Maintenance	Custodial	Food	Refuse	Other
ACC	1 F&T					
AETC	1	3	2		1	1
AFSPC						1 F
AMC	2 F	2 F	2	2		3
USAFE			1			

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^aThis chart lists all 22 contracts to show how many had award fees, award terms, or neither. "1F&T" means there was one contract with both an award fee (F) and an award term (T). "2F" means two contracts had award fees. A number by itself means that there was no award.

There were varying opinions on award fees and terms. Most contracting officers involved with custodial contracts, for example, said, "How can you be cleaner than clean?" and therefore appeared to question how an award could be equitably administered.

Personnel at some bases mentioned that they had discussed the possibility of award fees but decided that funds would not be available for them. Those at AMC bases felt that grounds maintenance was a "high visibility" item that warranted the incentive of award fees and were successful in arguing for them. Officials at the ACC base had to fight with headquarters to get the award fee for MFH, because headquarters thought the use of past-performance information in awarding future contracts should be motivation enough. Eventually, the "visibility" argument—in addition to the importance of MFH for quality of life—convinced ACC headquarters to allow the award fee.

The award-fee criteria were usually a combination of objective measures (such as statistical comparisons of performance with requirements in the SOW) and subjective measures (a committee's assessment of "quality"), and in all cases the criteria were clearly outlined for the vendor.

Our interviews revealed that most bases had not considered using award terms. Some of those interviewed said they could not find examples of commercial use of such terms;²²

²²In fact, formal award terms are not common in commercial contracting. However, an ad hoc administrative decision by a commercial buyer to extend a contract with a good provider is a common phenomenon. The rationale is this: Why change horses in midstream if your current mount is a good one? An award term can be seen as a government proxy, tailored to the more formal administrative structure that

others felt that knowing that performance would be evaluated in future competitions was sufficient incentive for vendors to perform well. The motivation for the ACC base's use of award terms is unclear, but administration of the award is reasonably well laid out in an award-term plan. After the second year of the contract, a review of contractor performance with respect to award fees will be conducted; that information combined with subjective assessments of other performance areas will determine if the contract will be extended to a sixth year (one year beyond the standard basic year plus four option years). After the third year of the contract, another review will be conducted to determine the award of a seventh year.

federal contracting requires, for this common commercial practice. This example illustrates the challenge of using market research creatively to bring best commercial practice into a federal setting.

**PPT and Best Value Prevailed in
Source Selection**

	MFH	Grounds Maintenance	Custodial	Food	Refuse	Other
FAR 12			1		1	2
PPT	2	2	2	2	1	1
Best value	2	3	3			1
Sole source						1

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In the chart above, we record the reported source selection methodology used for each contract. (This chart shows 24 contracts because of a double count for the refuse contract and the custodial contract at one base. In these cases, the contracting office said that the contracts were “Part 12 and PPT” contracts.²³) The descriptions of two “best value”²⁴ contracts in our interviews sounded more like PPT²⁵ contracts; however, this term was not used in the interview, and there was no information on the federal government electronic posting system (formerly called EPS; now called FedBizOpps) that was more specific.

²³ FAR Part 12, “Acquisition of Commercial Items,” prescribes “procedures unique to the acquisition of commercial items” and establishes “acquisition policies more closely resembling those of the commercial marketplace.” These policies include the recommendation to use past-performance information in evaluating proposals, the requirement to use FFP or FFP with economic adjustment contracts, and the requirement to rely in most cases on a contractor’s quality assurance systems as a substitute for government inspection. Personnel at several bases mentioned FAR Part 12 as a component of their acquisition process for grounds maintenance, custodial services, and refuse collection, apparently because these services can satisfy the definition of “commercial items” given in FAR Part 2.101.

²⁴ FAR Part 15.101 says, “An agency can obtain best value in negotiated acquisitions by using any one or a combination of source selection approaches.” The two primary approaches mentioned as part of the “best value continuum” are “tradeoff” processes and the Lowest Price Technically Acceptable (LPTA) process. A tradeoff process permits tradeoffs among cost or price and noncost factors and allows the government to accept other than the lowest-priced proposal as long as the perceived benefits of the higher-priced proposal merit the additional cost. When a tradeoff process is used, the solicitation must clearly state the evaluation factors that will be used in the competition and their relative importance, and it must also state whether the combined nonprice factors are significantly more important than, approximately equal to, or significantly less important than price. The LPTA process (which is a best value process by definition in the FAR) is used when best value is expected to result from awarding the contract to the technically acceptable proposal with the lowest price. This process does not allow tradeoffs. None of the contracts discussed in this study used the LPTA approach.

²⁵ According to Headquarters Air Mobility Command’s *Performance-Price Tradeoff Guide*, “PPT is a simplified best value source selection strategy that permits a tradeoff between price and performance in reaching the award decision.”

People interviewed for this study were enthusiastic about best value approaches in general and PPT in particular.²⁶ AMC has clearly encouraged the PPT approach; 70 percent of the PPT contracts were in AMC; and seven of the eleven AMC contracts used this source selection process.

A typical remark was that gathering past-performance information in the PPT process was the best way to get the best value for the government. One interviewee said, “[It’s] the best thing we’ve done in a year and a half.” Another commented, “The [functional] customer loves the change to PPT...the happiest thing [was when] they told us, ‘Low bid doesn’t win.’” The collection of past-performance data was also a key incentive for contractors to satisfy their customers.

Although many of the people we interviewed noted a push for PPT, liked how much it simplifies the selection process, and indicated that they wished they had known about it sooner, personnel at one AMC base expressed a preference for a “full” best value selection process. This group felt that the PPT process can overlook too many things and that a more complicated approach (e.g., one that includes comparing technical proposals) “gets the government more for its money” and is worth the additional work. A past-performance assessment tells you how well an offeror has performed against promises made in the past and whether or not those promises involved creative techniques. Close attention to the technical proposal tells you how creative the offeror can be when considering currently available capabilities. The two examine distinctly different aspects of an offeror’s desirability. Positive scores on both are important to getting the best performance for the money.

We asked people if they felt that using innovative acquisition methods attracted a new type of vendor. Only one contracting officer thought this was the case. At one base, 30 vendors showed initial interest in a contract by attending an open house; 16 eventually made offers, and the contracting officer at this base thought that having a shorter SOW and using commercial standards *might* have had something to do with the increased interest. An interesting comment from personnel at one AMC base was that the small business that won their contract had teamed up with a larger firm—something they had not expected. They speculated that small businesses do not have that much to offer in past-performance data, but big businesses do, and “teaming” can give a small-business offeror a boost because of the larger business’s record.

²⁶ There was apparently a minor controversy in 1998 about where PPT fit into the best value continuum. FAC 97-02 (dated September 30, 1997) implemented a rewrite of FAR Part 15, and this rewrite introduced language that prohibited tradeoffs when using LPTA. At that time, the Air Force considered PPT a form of LPTA. In August 1998, the Air Force issued Contracting Policy Memo 98-C-12, which points out that “with the new FAR Part 15 definition...PPT cannot be considered a form of LPTA. However, it is the Air Force position that PPT is still a viable technique consistent with the spectrum described in...FAR 15.101.” To solve the problem, AFFAR Subpart 5315.101-1 was amended to specify that PPT was a tradeoff process, not an LPTA process.

Questionnaires and Contacts Were Sources of Past-Performance Data

- **Most used questionnaires for data collection**
 - MAJCOM templates available
 - Sometimes modified for specific circumstances
- **Personal contacts used for supplemental information**
- **Due dates for submission varied**
- **Some education needed on importance of providing good past-performance information**

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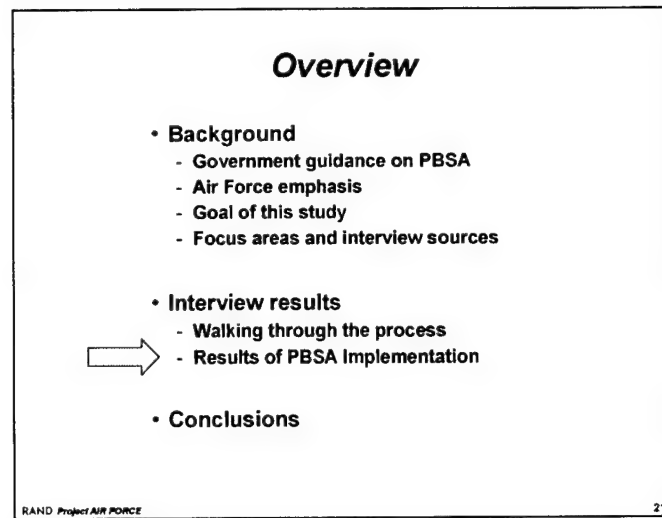
Personnel at all bases we contacted made use of past-performance data in accordance with the FAR requirement to do so, although there were minor variations in approaches to the data collection. Virtually all bases used questionnaires that were sent to previous buyers of a vendor's services. Officers at one AETC base and the ACC base said that they used a command template or a "standard" questionnaire. Those at another AETC base created their own questionnaire despite the apparent availability of the template.

Some contracting officers gathered past-performance information from buyers through the vendors themselves by including questionnaires with the solicitation; vendors could then send the questionnaires to other buyers they had worked with. Other officers obtained lists of references from potential vendors, and the contracting office then sent the questionnaires to these references. Follow-up telephone calls were made frequently, especially if there was adverse information. One group of contract administrators also pointed out that they did not limit themselves to references provided by the vendor; they also used personal contacts to add information.

Past-performance information (or the reference list) was usually required at the same time as the proposal. The AFSPC contracting office, however, required past-performance information a month before other parts of the proposal; contract managers were pleased with this approach because it ensured that if they had trouble collecting past-performance information, this would not delay proposal evaluation. On the other hand, administrators at one AMC base did the same thing and found that (1) they ended up reviewing the past performance of some vendors who never submitted proposals, and (2) it was unfair to ask vendors to submit information in two stages when those vendors did not yet know whether they would submit a full proposal.

As an interesting aside, interview results from one base indicated that there is some need to educate buyers—especially government buyers—as well as vendors about the importance of filling out past-performance surveys carefully. We were told that some

previous buyers "gave lower ratings until we told *offerors* to emphasize to *previous buyers* how important the references were so that previous buyers would either take the references more seriously or give better grades in the surveys they sent to [the evaluators]." Providers who had worked with commercial buyers in the past, such as airports or hospitals, did better on past-performance ratings than providers who had worked only for government buyers. The Air Force informed "government" providers of this finding at the end of the source selection.



RESULTS OF PBSA IMPLEMENTATION

We conducted these interviews primarily to collect information about the services acquisition process as discussed above. However, the interviews also yielded other important findings, to which we will now turn.

Study Found Satisfaction with New Contract Performance

- There was a general belief that performance has improved
- *Objective* evidence of improvement is lacking
 - Most contracts were less than a year old
 - “Tracking” metrics are lacking
- Surprisingly little credit was given to PBSA
 - “We were just lucky to get a good contractor.”

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Those we interviewed generally believed that the contracts they developed using PBSA are working well. Indeed, some interviewees unequivocally approved of the process. One noted the difficulty of getting rid of an uncooperative contractor when sealed bids were used but added that by taking into account best value instead of just the lowest bid, the base was able to justify another vendor. However, not enough time has elapsed to allow for an objective evaluation of changes in performance because most of the contracts we discussed in our interviews are relatively young—i.e., in force for approximately six months. More disappointingly, there is no indication that bases are making an effort to formally compare the performance of the current contractor with that of the previous contractor. For example, although contracting officers at some bases told us that complaints were down under the new contractor, they have not analyzed the record of complaints for the previous contractor. According to one person we interviewed, “Complaints are part of the file, but we don’t do formal tracking of them.”

Other bases required that the *contractor* keep metrics that can be reviewed by the base, thus relying on the contractor to track trends. Although this is an effective approach for managing the current contract, it still does not help the Air Force measure improvement over previous contracts.

We were taken aback by the fact that, despite widespread satisfaction with new contracts, personnel at only two bases attributed the improvement they had seen to the use of new contracting practices or to the care they might have taken in reviewing past performance. Common phrases we heard were “We’ve been lucky we got such a good contractor,” “We may have been lucky,” and “We had a lot of luck.” Indeed, officials at both of the bases that credited new acquisition practices *still* maintained that they had been lucky! We are not sure if this represented modesty on their part or the assumption that since they had told us they used PBSA and were satisfied with it, we should conclude that the solicitation approach deserved the credit.

Effect of PBSA on Costs Is Difficult to Determine

- Changes in work scopes make it hard to compare new and old contracts
- Limited confidence in government estimates of costs, particularly in new contracting environment
- Effects on internal costs vary significantly
 - It always takes more work the first time you do something
 - Early steps of new approach will generally take more work
 - Acquisition team can simplify and speed early work
 - Demand for QAEs is falling more slowly than expected

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Two different kinds of costs are important in estimating the effects of PBSA on service acquisition costs. The first is the price the Air Force pays for the services delivered. As noted above, this is usually a firm fixed price for the contracts we examined. The second is the value of the internal resources the Air Force commits to arranging and then managing a service acquisition. The total of these costs should be taken into account in determining the effectiveness of PBSA implementation, but the effects of a PBSA approach on both types of costs are difficult to assess for the contracts we explored.

The effect of PBSA practices on contract prices is hard to assess for the contracts we studied because (1) the work scopes relevant to the contracts we examined changed with the new contracts, and (2) the Air Force has no simple way to adjust costs for the changes observed in work scopes. For example, the price of one custodial contract was \$45,000 lower per year than in the previous contract even though it actually included more services than did the previous contract, and the ACC MFH contract was \$49,000 cheaper annually despite an increase in work requirements. In these two cases, the savings appear to have resulted from economies of scale realized through contract adjustments that were a consequence of using a best value approach. However, this conclusion is only tentative. In most cases, we could not clearly attribute price changes to a move toward PBSA.

One might hope that the government cost estimates used as a standard part of an acquisition could help overcome this problem. However, no one we talked to was comfortable using such estimates to explain changes in contract prices. In fact, when we did discuss government cost estimates, we detected limited confidence in them. In two cases, for example, the winning offers were below the government estimate, and the

contracting office immediately attributed this to the government's inability to make accurate estimates.²⁷

Changes in "internal" costs are even more difficult to measure. We can divide these into "ex ante" costs—i.e., those incurred in the preparation of a new contract—and "ex post" costs, or those incurred in the management of a contract once it has been awarded.

Discussions of these costs were quite impressionistic. No one had attempted to track the costs of the new approach relative to the traditional approach. Because almost everyone involved in a service acquisition has other simultaneous duties, it is difficult in any case to sort out what portion of the relevant players' time and effort should be attributed to a new contract. Indeed, this would be hard even if the players tried to track these costs in real time; thinking about such costs retrospectively yielded a fairly wide range of impressionistic estimates. Almost all agreed, however, that these ex ante costs were higher than they would have been under a traditional approach.

Those we interviewed believe ex ante costs were higher with new PBSA contracts for two reasons. First, this is a new form of acquisition. Personnel spent considerable effort preparing to do something they had not done before. Several emphasized that although these costs were considerable for the first effort, they should not recur for subsequent efforts. The new costs appear to have been more severe early in the time period we examined, when available training was limited and guidance was evolving.

Second, the new approach trades off greater investment in the preparation of a contract for lower administration costs and better contract performance in the future. For example, those we interviewed at most bases told us that market research requires additional resources, and most said it is worth it. A smaller number said that additional interaction with potential offerors added costs but was generally worthwhile. Cross-functional teams made these efforts simpler than would otherwise have been the case. Personnel at a few bases strongly believe that their teaming arrangements probably reduced the time required to prepare a new contract when compared with a traditional approach. The net effect of these preparation costs is unclear.

We expected that the new focus on customer complaints would lead to a reduction in QAE manpower or workload and hence to a significant reduction in ex post costs. However, the comments from our interviews are ambiguous. Three factors appear to be important in this context.

First, QAEs play important roles in the preparation of new contracts as well as in their administration. Even if the new contracts are reducing demands for QAE administration, they are increasing demands for QAE participation in new contract preparation, as noted above. The net result is that the QAE workload has not dropped at many bases and is not expected to do so until the development of new contracts becomes more routine, thereby reducing the demand for QAEs in the preparation of new contracts.

²⁷The changing acquisition environment makes government cost estimation even more difficult than was the case in the past. For example, the Defense Contract Audit Agency has found that because its standard cost-auditing tools are based on historical cost data, these tools cannot be used to anticipate the kinds of cost savings that innovative acquisition can generate.

Second, few bases are prepared to transition immediately to the new approach to administering contracts. Formal inspections remain important in a variety of critical activities. Moreover, personnel who at first claimed to rely 100 percent on customer complaint for quality assurance indicated, upon further discussion, that the QAEs maintain an independent presence overseeing execution and ensuring that (1) contractors understand this new approach, and (2) the new approach in fact works as well as advertised. These QAEs typically move from a formal sampling approach to a less formal form of inspection. If the new approach works as well as anticipated, these bases expect to phase out such inspections and the demand for QAEs associated with them.

Third, one or two bases have made the transition away from formal inspections to customer complaints a formal component of the way they motivate the contractor to perform. The better performance is, the less formal oversight the base will maintain. If performance improves as expected, demand for QAEs will fall. If not, these bases want to reserve the capability to use QAEs more aggressively.

The net effect of these considerations is that few bases have reduced their demand for QAEs. The workload for QAEs may already have fallen at some bases, but these bases have not yet shifted these QAEs to other duties. At one of the few bases that had a decrease in QA personnel, the loss of personnel came first, and this reduction was one reason (in addition to AFI 63-124) the QASP was changed. Finally, contract managers at one base pointed out that some QA personnel are not excited about "writing themselves out of a job" by changing from inspections to customer complaints as a way of monitoring contract performance. Actual experience with the demand for QAEs obviously bears close watching in the future.

Attitudes Toward PBSA Are Generally Positive

- Experiences of most players have been good
 - Customers: Pleasantly surprised. Complaints are down.
 - Contracting: Happy. It works the way it should.
 - Functionals: Mixed. Is the loss of control acceptable?
 - Contractors: Happy. Gives them more freedom.
- Players have a mixed reaction to AFI 63-124
 - Flexibility creates new opportunities to improve contracts
 - Ambiguity forces reliance on other guidance
- Experienced players emphasize that FAR has always allowed everything that is happening today

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Those we interviewed generally had positive assessments of their experience with PBSA. Most reported that customer complaints had decreased; contracting officers were pleased with their success in using market research and writing shorter SOWs; and we were told that contractors appreciated the greater independence they enjoyed. Some functional representatives had mixed feelings, however. While they recognized increases in customer satisfaction, they sometimes wondered if the elimination of “how to” language in SOWs made it more difficult for them to control contractor performance.

The positive performance results mentioned earlier were rarely attributed directly to the use of performance-based contracts, better QASPs, or formal incentives but were usually credited instead to other elements of the PBSA approach. Typical comments about successes were as follows:

“The low bid process is antiquated. The [best value] process gives a better product.”

“If you can’t get best value from an offeror, don’t go any further.”

“Past performance is the central key to creating an incentive to perform.”

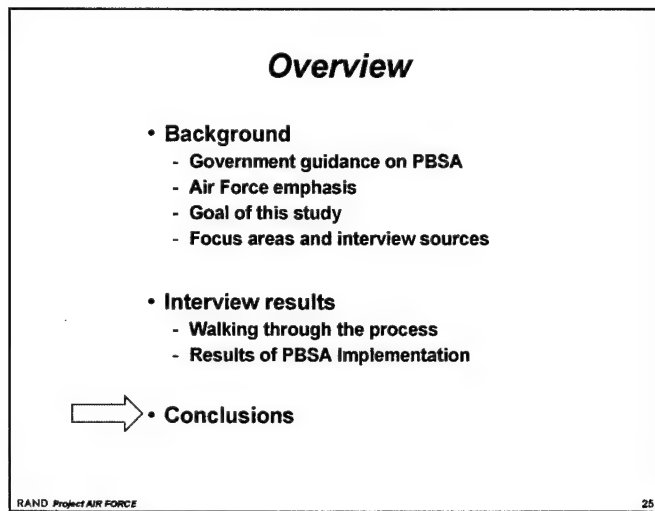
“Contractors like [PBSA]...not so much looking over [their] shoulder.”

Given that most of these contracts were solicited when AFI 63-124 was approximately six months old, it is no surprise that there was a wide range of opinion on the effectiveness of that document. Personnel at one base liked the flexibility of the instruction but thought that some areas could be more specific. However, they had no specific suggestions on what they would change. Officials at another base simply said, “We don’t like it. It’s okay for simple services, but it can’t deal with complex services or a large scope of work.” Since many had applied the instruction when it was new, there were no examples from which they could borrow when they wrote their contracts. In the words of one person, this could make for “a hellish time.”

Another complication—again no doubt a result of AFI 63-124's newness—was occasional disagreement with headquarters about what counted as PBSA. Some contracting officers mentioned several iterations with headquarters contracting staff as they refined their SOWs so that all could agree that it was performance based.

Personnel at two bases seemed to wonder what all of the fuss was about. One said, "PBSA has been in AFM 64-108 [the Air Force manual on service contracts that AFI 63-124 replaced] for years. It was not really a new approach." Another remarked, "It [PBSA] has always been there, but not utilized." Personnel who made these comments were quite experienced, and well informed about the rich capabilities available in the FARs if a contracting officer wanted—and knew how—to use them.

Perhaps that last remark is key: The potential for PBSA *was* there before, but people who were accustomed to doing things the "old" way did need the push that AFI 63-124 provided to encourage them to *apply* it.



CONCLUSIONS

We conclude with a summary of lessons learned.

Although the newness of PBSA and the lack of performance metrics make it impossible for us to objectively evaluate the effectiveness of PBSA implementation in the Air Force, we were able to identify policies and practices that bases were pleased with and found helpful. We also identified areas that appear to require improvement.

Three Practices Seem to Work Well

- **Teamwork**
 - Promotes “buy-in” of PBSA methods
 - Promotes mutual understanding between contracting office and functional customer
- **Market research**
 - Facilitates application of commercial standards
- **Past-performance evaluation**
 - Gets the Air Force better value
 - Provides incentive for vendors

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People in the Air Force are applying PBSA and are generally pleased with the results. One contracting officer said this approach to acquiring services was “comforting.” He liked being able to apply the same business sense he uses in his personal decisions to contracts for services to the Air Force. Among the practices that seem to work well are teamwork, market research, and using past-performance information.

Teamwork is important for at least two reasons. First, PBSA practices (and the flexibility allowed by AFI 63-124) are still new, and it is important to get people “on board” to accept the need for change. In some cases, it was only through the education provided by BRAG discussions or an analogous cross-functional team that contracting personnel were able to convince functionals of the effectiveness of the PBSA approach. Second, cooperation in developing the SOW helps the contracting office understand the real needs of the functional customer, and the functional customer understand the contracting office’s requirements for writing a performance-based contract. Those who believed that working together helped meet the needs of the functional customer while also giving the Air Force better value were most pleased with the PBSA approach.

Market research is regarded positively by those we talked to in the field, who seem pleased with the way it helped them apply commercial standards to their SOWs. Those who were the first in their commands to use AFI 63-124—i.e., those who felt they were exploring unknown territory without a map—took the initiative to do the market research on their own. Although many mentioned that market research was time-consuming, none said that it was particularly difficult.

Everyone was pleased with the use of past-performance information in evaluating competitors despite the added workload it required. They asserted that the Air Force gets better value, and the knowledge that past-performance information is used provides incentive for vendors to do well in order to get new business in the future.

This list does not include items that are unique to performance-based contracts, such as SOWs that tell what is desired instead of how to do it, better QASPs, and formal

incentive programs. As noted earlier, those we interviewed rarely attributed improved performance directly to these elements of PBSA. However, they did have positive attitudes toward these practices—especially the new approach to writing SOWs. Since these contracts are relatively new, it may be too early to tell how performance will change as a result of the use of performance-based contracts, and objectively measuring any changes may thus be difficult.

Training, AFIs, and Metrics Need Improvement

- **Training**
 - Better understanding of commercial practices
 - Hands-on exploration of PBSA with case studies
 - Access to training
 - How to get up-to-date information
- **Adequacy and understanding of AFIs, FARs**
 - Better examples in AFIs needed
 - Clearer interpretation of FARs necessary
- **Use of outcome-oriented metrics**
 - Relate PBSA to the *mission* of the Air Force
 - Collect data that can be used to evaluate PBSA

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Everyone we interviewed agreed that they had not received enough formal training on PBSA. Many felt they had received no meaningful training at all. Others felt that the basic awareness training they had received was too introductory and general to be useful. In effect, this training (perhaps ironically) told them *what* PBSA was without telling them *how* to do it. If the Air Force wants to fundamentally change the way it purchases services, Air Force training should provide concrete details on *how* to implement the new practices.

To some extent, this is more than a training problem. Before the Air Force can design a course, it must develop the material on “how” that goes into the course. The most critical comment came from someone who pointed out that this was a problem at the Air Force headquarters level, because a decision was made to require the process without determining what was needed. However, this person was also sympathetic. The critic noted that the Air Force is early in the transition, and the “experts” are learning along with everyone else. This perspective suggests that the Air Force should take advantage of that learning and incorporate it into training for use in the future.

It appears that this is beginning to happen to some extent. One AETC contracting officer had just returned from a two-week training course at Lackland Air Force Base and found it excellent. “We now know how to do this and can do better in the future,” he said. ACC personnel also praised an AMC course they had attended that had educated them on applying PBSA to military family housing.

The desire for better training had three themes:

1. **Exposure to specific, concrete examples of relevant commercial practices.** One contract manager noted that his market research had revealed that commercial firms generally do not buy food services in the same way that the Air Force does. Commercial firms buy not only labor services, but also all the assets and skills relevant to providing restaurant services. Better understanding of this insight could change the Air Force’s approach toward acquiring food services. Another noted the

importance of practical new skills for this new acquisition environment. For example, in a PBSA setting, commercial sellers expect a much higher degree of courtesy and diplomacy than Air Force QAEs have been trained to employ in their traditional roles.

2. **Practical training on the new acquisition process.** Some of those we interviewed recommended a course that provides a step-by-step approach to the process with suggestions on whom to involve at each step and how much effort and time to expect each step to require.²⁸ Put another way, they asked for clearer guidance that would walk them through each element of a performance-based acquisition. Even if PBSA does not lend itself to a standard template for a SOW, a standard template can certainly be developed for the process a base uses to create its new SOW. Several people stated that case studies of successfully completed acquisitions would help them better understand what to expect. Simply reading such case studies would help; role playing or gaming such cases could add a useful aspect to training.
3. **Access to training.** One person suggested that more training slots were needed to get experience levels up quickly. Another claimed that PBSA was not mentioned in basic introductory technical training courses for contracting. A third lamented the loss of experience in the business because of shorter rotations—which creates the need for ongoing, rather than one-time, training opportunities. It is important to note that while contracting personnel are receiving some measure of training on PBSA, many functional personnel are not. This is particularly troubling for PBSA, since it requires teamwork to function effectively.

The ability of personnel at these bases to implement PBSA—as well as their satisfaction with their implementation—is all the more remarkable given this training experience to date. We were impressed by the initiative those we interviewed had shown in finding their own way to the information needed to complete their (typically) first performance-based services acquisition. However, there was some frustration with the need to search for basic information and the sometimes outdated or conflicting guidance that appeared on official websites. This could be a continuing problem. In our research, we have found it difficult to keep up with the proliferation of information on this topic, and the number of “central” websites seems to be increasing. Perhaps part of training development should be better guidance on where to find information.

Personnel at two bases brought up the idea of sharing past-performance information, or making information on contractors available at a central website. This idea remains controversial. For one thing, this is not a practice that the commercial world has adopted. For another, it will be time-consuming and costly to develop such a data source, and it will be difficult to ensure the reliability of the information.

²⁸One training aid mentioned by more than one base was the Headquarters Air Mobility Command's *Performance-Price Tradeoff (PPT) Guide*. SAF/AQ has worked to make training more available on its website. A series of several briefings is currently available, with topics such as *What is PBSC?* as well as *Writing SOWs*, *Competitive Sourcing*, and *PBSC Scenarios*. According to SAF/AQCO, these on-line courses are being well received.

AFI 63-124 is a work in progress; a rewrite is currently under way. As we have seen, some personnel liked the vagueness of the first version; others wanted more guidance. We believe that even those who liked the instruction's vagueness would be happy to see more guidance such as that addressed above. For example, the revised instruction could provide more examples of performance-based SOWs, including more samples of performance objectives and performance thresholds from a variety of services.

Some federal legislation that places restrictions on wage rates and competition—such as the Service Contract Act and the Small Business Act—is seen as getting in the way of implementing PBSA. “How can we act commercial when we’re hampered by these laws?” said one interviewee. “Competition requirements, set minimum wage rates...hurt us. [The] emphasis is on commercial practices, but our hands are tied.” The writers of the AETC refuse contract felt that it was difficult to build an incentive scheme when a contract is limited by FAR Part 12 to variations on an FFP arrangement.

It is unlikely that such regulatory limitations will change, but Air Force personnel would benefit from a better understanding of which limitations are really binding and what options are available in the face of these limitations. PBSA suggests that the Air Force should approach standing limitations in a new way. Rather than taking a conservative stance or assuming that nothing is allowed unless it is explicitly sanctioned, PBSA endorses a creative approach that seeks a way around regulatory obstacles. Everything is allowed unless it is explicitly prohibited, and even then, creative opportunities exist to frame prohibitions in more favorable ways. Many of the personnel we talked to embody this spirit—those who are using award-term contracts, for example. Less motivated personnel will need more encouragement than this first wave of innovators has required. Training could profitably emphasize the creative nature of PBSA and illustrate it with concrete examples of what can be done and resulting performance improvements.

The Air Force PBSA program does not mandate formal tracking of performance and cost to evaluate how PBSA is affecting outcomes relevant to ultimate Air Force customers, such as war fighters and military families. Thus, the fact that no base we examined is tracking such metrics does not mean that Air Force PBSA is not working as intended. But it is an important aspect of current PBSA in the Air Force that “doesn’t work” in the Air Force’s best interests. In failing to track metrics, the Air Force is missing a chance to document the actual outcomes of its early experience with PBSA and to use such documentation to (1) promote further application of PBSA throughout the Air Force, and (2) continually improve the application of PBSA as the Air Force learns from its accumulating experience. The adoption of performance-based contracting methods is ultimately a way to help the Air Force accomplish its mission more efficiently and to obtain the best value for the American taxpayer. The support of leadership at the base level is critical to the adoption of PBSA methods, but without data to show that PBSA is helping them do their job better, these leaders will be hard to win over.

This is not a simple problem. Previous RAND research indicates that the best firms in the commercial sector are having a difficult time measuring the benefits of PBSA, too—even though they share the general feeling that it improves performance.²⁹

In our interviews, we detected little interest in developing such measures or in collecting data that might be useful for studying this in the future. Personnel in the field face many competing demands on their time, and they do not see the value of such information to their immediate efforts. They will not collect it as aggressively as they have pursued other aspects of PBSA unless they understand how the Air Force as a whole can benefit from such information.

This summary of what needs to be improved should not detract from the “bottom line” of our interview results: In its opening round of performance-based contracts, motivated people in the Air Force services acquisition business were able, despite limited and sometimes contradictory information, to implement PBSA practices in a variety of services. Most are pleased with the results, even if objective measures of their success are not yet available.

²⁹See Laura H. Baldwin, Frank Camm, and Nancy Y. Moore, *Strategic Sourcing: Measuring and Managing Performance*, DB-287-AF, Santa Monica: RAND, 2000.

Appendix A

LESSONS FOR FUTURE SERVICES ACQUISITIONS

Personnel we talked to at each base emphasized different lessons important to their own recent experience, and the list below draws on their collective experiences. The lessons offered are consistent with (1) specific lessons identified by those we interviewed, (2) what we observed in the acquisitions we examined in this project, and (3) lessons identified in related analyses that examined similar services acquisitions elsewhere.

Successful implementation of PBSA will be more likely and more complete if Air Force bases initiating new service acquisitions do the following:

GETTING STARTED

- Get all Air Force stakeholders to buy into using the new approach to services acquisition. Three factors are important:
 - Get the support of the base leadership. Do this by (1) relating the proposed changes to factors that the base leadership cares about, and (2) keeping the leadership informed about how the unfolding acquisition affects the factors identified. The leadership's time is precious. When you have its attention, focus on how a new approach affects the base, not specific functional metrics.
 - Train all relevant Air Force players, from the base leadership through the functional customer communities to the contracting office and any other functionals that will be involved (e.g., financial management, small business, competition advocate). Demonstrate why the new approach is important to the Air Force. Give them the skills they need to succeed.
 - Use teams to maintain the involvement and buy-in of all relevant communities. Tailor teams to the acquisition at hand; many variations are possible. Schedule periodic team-based reviews of contract performance, and include base leadership in incentive reward decisions.
- Emphasize performance relevant to the Air Force as a whole over compliance with specific new acquisition policies.
 - Mere compliance with new Air Force guidance does not guarantee a significant increase in military capability or quality of life on a base or a reduction in total ownership costs to the Air Force. In fact, simply learning to do things in a new way can impose costs without yielding offsetting benefits.
 - Increased emphasis on creative use of the new tools and capabilities now available is more likely to benefit the Air Force than a focus on simply complying with new policy.
- Develop a services acquisition plan in which the elements of the plan work together. For example:

- Market research and source selection will both work better if they work together. Market research helps frame an acquisition to attract the right sources; early contact with industry in source selection (e.g., requests for information, “industry days”) refines initial market research.
- The flexibility allowed in performance-based SOWs and quality assurance plans presents fewer risks if (1) the Air Force can choose a high-quality, reliable provider that does not require detailed oversight, and (2) the winning provider knows that its performance on this contract will affect its success in future competitions.
- Reliance on customer complaint as an element in quality assurance works better when the customers who are allowed to complain clearly understand the terms of the contract.
- Provide appropriate training when it is needed and, if possible, tailored to the acquisition in question.
 - Training shortly before an acquisition starts is helpful because (1) it is easiest to apply new skills shortly after they are learned, (2) training just before an acquisition is easier to tailor to that acquisition, and (3) with continuing staff turnover, such training increases the likelihood that all relevant players have the awareness and skills they need.
 - Provide awareness training to all relevant players.
 - Provide more detailed, “how-to” training tailored to the tasks each player will execute in the acquisition. All players need concrete training on the basic steps in a new kind of acquisition, the players relevant to each step, their roles and responsibilities, and reasonable estimates of schedule and resource requirements for each step. If players must exercise judgment about designing a source selection or statement of objectives, case-based training that supports such decisionmaking will help. If they will be working in a team setting, training in a team setting will provide good preparation. If the training uses examples keyed to the acquisition in question (e.g., A-76, small-business set-aside, a particular service), application of new skills learned will be more direct.
- Keep relevant players engaged in effective teams throughout the course of the acquisition and subsequent contract execution. Tailor membership and frequency of meetings to the tasks at hand. The points below offer more detail.
- Expect the new approach to take more time than the traditional approach the first time it is applied. Plan for this in activity assignments, staffing decisions, and more general resource planning. This cost is likely to fall fairly rapidly as experience accumulates at a base.
 - Formal and informal training will absorb staff time and perhaps financial resources leading up to and through a new acquisition.
 - Staff members will take longer to do things the first time they do them. They will make mistakes that must be corrected. They will puzzle over new responsibilities. Such inefficiencies are investments in the future.

- Coordination between bases and their MAJCOM headquarters may take longer as they work out new procedures and the specific application of new policies.

MARKET RESEARCH

- Use market research to:
 - Help frame requirements in ways that attract better potential providers by allowing them to do what they do best in a commercial setting (e.g., buying food services rather than the services of food servers).
 - Help frame acquisition methods in ways that attract better potential providers by reducing their participation costs and helping them shape Air Force acquisitions to match their capabilities to Air Force needs (e.g., interaction with potential providers, pricing and payment policies, quality assurance systems).
 - Identify the best potential providers themselves and seek specific ways to attract them to competitions.
- To frame market research, look ahead through the acquisition and ask what kinds of information about commercial practices and players are relevant to each step of the acquisition. Properly conducted, such market research can shape every aspect of an acquisition.
 - It helps the Air Force recognize standard commercial practices, which must often be carefully adapted to Air Force use.
 - It helps the Air Force tailor individual acquisitions to the services in question and practices peculiar to particular locales. Expect considerable variation across services and, for some services, across locales.
- Involve all players relevant to the issues identified above in market research. Contracting, functional customers, and other communities have different questions to ask in market research. Encourage these communities to work together so that each community can learn what it needs to know about commercial practices relevant to the Air Force.
- Do not be frightened off by the ambitious agenda proposed above for market research. Simpler versions can add value with only limited preparation and training.
 - Simple review of potential providers in the local Yellow Pages can provide a start. More complete industry directories are easily accessible. Potential providers are generally open to inquiries relevant to Air Force market research.
 - Local buyers of similar services can be quite helpful in identifying relevant commercial practices and standards specific to a service or to the terms on which firms buy and sell the service. Such firms are willing to spend more time if the Air Force brings information to them that they value. This will become easier as the Air Force accumulates more information that it can share.

- Discussions on the phone are generally easier to arrange and execute than face-to-face meetings and are generally more productive than asking a firm to complete a questionnaire in writing, particularly if the firm is not a potential provider.
- “Industry days” can attract a great deal of interest, but are more successful if carefully planned to convey and elicit specific pieces of information. Careful market research can be invaluable in focusing such events.
- More complex forms of market research—such as formal benchmarking studies, benchmarking networks, and third-party surveys beyond a locale—can be extremely useful, but they are not necessary. Air Force bases can get started on effective market research without anything this elaborate.

DEFINING REQUIREMENTS

- Use requirements relevant to the base and to the Air Force as a whole. To the full extent possible, identify the operational requirements relevant to a service the Air Force is acquiring. Use these requirements to focus on the value the Air Force expects to get from a service, not the methods used to provide that service. It is often easier for the ultimate Air Force customer who will benefit from a service to think this way than it is for the functional customer who has traditionally defined how the Air Force wants the work done.
- Use market research to propose, review, and refine requirements:
 - Can requirements tied to traditional Air Force functional guidance be reframed in a way that (1) reflects higher-level goals, and (2) clearly tells potential commercial offerors what the Air Force really cares about?
 - To the extent that the stated requirements reflect detailed guidance from standing Air Force instructions and other policies, does such guidance preclude approaches observed in the commercial sector that might work in an Air Force setting? If so, what difference between the Air Force and the commercial sector makes these commercial approaches inappropriate to the Air Force? What compromises are possible?
 - To the extent that MAJCOM guidance mandates requirements to ensure that the Air Force seeks the minimum quality of service appropriate for government use, do such requirements differ from requirements stated in the commercial sector? If so, why? Is it possible to show that a higher level of quality could promote the interests of the Air Force as a whole?

SOURCE SELECTION

- Use past performance as a major criterion in any source selection.
 - It yields a distinctly different, better provider for the Air Force, even when an acquisition attracts the same offerors that have come to past acquisitions of the same service.

- Bases differ on the relative desirability of (1) a full best-value source selection, and (2) a slimmed-down "tradeoff" version that focuses on past performance and price. The slimmed-down version is easier to administer, but does not yield important information about technical capability that, in some circumstances, may be worth the extra effort it requires.
- To date, few losing offerors have used past-performance data successfully to challenge the Air Force's choice of a winner.
- Use a definition of past performance appropriate to each acquisition.
 - Questionnaires based on standard templates and given to offerors to send to their other customers are fairly easy to administer.
 - Questionnaires tailored to the factors relevant to a specific acquisition can give the Air Force additional data important to a specific decision.
 - Direct Air Force communication with other customers can clarify statements on questionnaires relevant to an Air Force decision.
 - These observations suggest that, even if centrally maintaining past-performance data cuts the costs to the Air Force of gathering such data, data tailored to a particular acquisition could easily be worth the extra effort.
- Asking offerors to submit past-performance data before their proposals (1) gives the Air Force extra time to process past-performance data, but (2) imposes unnecessary costs on the Air Force and offerors when offerors that have submitted past-performance data decide not to submit a proposal. Bases differ on the relative merit of these two approaches.

WRITING THE STATEMENT OF OBJECTIVES AND QUALITY ASSURANCE PLAN

- Coordinate the requirements, statement of objectives, and quality assurance plan carefully.
 - Clearly link requirements and objectives.
 - Clearly link objectives to metrics to measure performance, or judge a proposal carefully on how it makes this link.
 - Verify that any metrics approved (1) can be measured with data from available information systems, and (2) are likely to induce performance that promotes Air Force goals as they are reflected in the requirements stated.
 - Provide a mechanism for adjusting the metrics used to manage performance *without* reopening the contract if it is determined that these metrics do not induce the performance desired.
- To the full extent possible, reflect the goals described above in initial discussions with potential providers and in the formal request for proposals. Help potential providers understand the regime in which performance management will occur, and work with them to design a regime that (1) allows them to use quality control information

systems and procedures that they use with commercial buyers, and (2) meets the particular procedural requirements of federal procurement.

- Match appropriate incentives to the metrics used to manage performance.
 - Incentives that the bases currently use include (1) simple firm fixed prices, adjusted only for selected cost changes, (2) using today's performance to affect future competitions, (3) award fees, and (4) award terms. The Air Force has not yet considered other incentive systems often observed in commercial practice.
 - Incentives vary across services and locations. Some of this variability appears to be justified by differences in the services and the priorities of the bases buying these services. Other variability is likely to decrease as the Air Force learns more about the actual performance of specific incentives and the compatibility of commercial practices with Air Force priorities. The development of effective metrics to monitor performance changes will help the Air Force evaluate incentives and plan for the future.
 - Experience to date suggests that an award fee allows (1) enough subjective judgment to compare provider performance effectively to actual Air Force goals, and (2) enough procedural structure to limit provider objections to how it is administered. Award fees work best when a fairly transparent process is used to pick an award level and the provider is given clear feedback on the priorities that yield each award decision.
- Use appropriate teams to write the statement of objectives and quality assurance plan.
 - The ultimate customer of a service, including the base leadership as needed, can provide input on appropriate requirements and objectives and how to specify them in any quality assurance plan.
 - Functional customers will provide the quality assurance evaluators who manage performance and can suggest how to frame a plan to make the evaluators as effective as possible.
 - Contracting officials know details about the new approach to services acquisition and the requirements of federal procurement regulations. This can help shape relevant commercial practices to the federal setting.
 - Other functionals, such as financial management, bring analogous skills and perspectives to these activities.

Teams comprising these stakeholders (1) tend to reduce the time and effort required to coordinate information flow and decisions that involve more than one player, (2) give all players a greater sense of ownership, and (3) give an Air Force-wide perspective greater visibility relative to any one player's priorities. Such teams will produce statements of objectives and quality assurance plans that are more likely to reflect Air Force-wide priorities and to induce a provider to pursue these priorities.

PERFORMANCE MANAGEMENT

- Adjust the role of the quality assurance evaluator to reflect the new acquisition environment. For example:
 - Give greater attention to collecting information on customer complaints than on details of the process a provider uses to produce a service. In particular, move from sampling and surveying data about providers to sampling and surveying data about the satisfaction of the actual customers who use a purchased service.
 - Give greater attention to working with the actual customers who use a purchased service in order to understand the factors important to their satisfaction and to help them understand the terms of any standing contract.
 - Give greater attention to working with providers to solve problems as they arise, and give less attention to documenting failure to perform and calculating deductions from the price justified by a failure to perform. More generally, help quality assurance evaluators maintain a more positive and less confrontational relationship with providers.
- Be prepared to retain quality assurance evaluators until (1) it is confirmed that the success of new acquisition methods actually eliminates the Air Force's need for such evaluators to inspect and formally sample performance on a continuing basis, and (2) the Air Force no longer needs evaluators' input on teams designing new acquisitions.
- Use appropriate teams to advise quality assurance evaluators as they continue to monitor customer satisfaction and, where appropriate, provider performance more directly.

Appendix B
INTERVIEW QUESTIONNAIRE TEMPLATE

Telephone interviews for this project were structured around the following questions. Although the interviews themselves were free-flowing, information in the raw transcripts was transcribed into this template.

- 1. What does the new contract/QASP look like? How does it differ from the old contract?**
 - 1.1. Activity covered? Scope? Change from before?
 - 1.2. Date awarded or initiated
 - 1.3. Base/option structure
 - 1.4. Type? Award fee?
 - 1.5. Set-aside?
 - 1.6. Value? Relative to previous contract?
 - 1.7. Length of SOW? Change from before? Reasons?
 - 1.8. QA plan? Change from before? Reasons?
 - 1.9. Any special clauses? Change from before? Reasons?
- 2. What led you to make these changes? Direction from above?**
- 3. How did you prepare for the new approach, step by step?**
 - 3.1. Acquisition planning/BRAG/involvement of customer
 - 3.2. Market research
 - 3.3. Early contact: site visit, etc.
 - 3.4. Source selection—qualification, best value, PPT issues
 - 3.5. Development of SOW/QASP. Application of commercial standards.
- 4. What resources were required to develop the contract? How long did it take? Compared to the past?**
- 5. What training did you get? What training did/do you need?**
- 6. How are your PBSCs working to date? Is performance different from before? Any ability to document changes in quality of performance?**
- 7. How well did AFI 64-123 work for you? What else did you use? AFCESA templates?**
- 8. What would you do differently if you could do it again?**
- 9. Any suggestions for the rest of the Air Force?**

Appendix C
INTERVIEW PARTICIPANTS BY CONTRACT

Contract	Contract Type	Interview Participants
1	Base operations support	Contracting officer (civilian) Program manager, evaluation team chief (military)
2	Custodial services	QAE (civilian) Contracting specialist (civilian)
3	Custodial services	Contracting specialist (civilian) Functional manager (civilian)
4	Custodial services	Two contracting officers (one military, one civilian)
5	Custodial services	Contracting office commander (military) Director of business operations (civilian) Three others from contracting office (all civilians)
6	Custodial services	Two from contracting office (both civilians) Technical adviser from civil engineering (civilian)
7	Food services	Three from QAE (one military, two civilian) Contract administrator (civilian) Contract manager (military)
8	Food services	QAE (civilian) Contracting specialist (civilian)
9	Grounds maintenance	Contract administrator (civilian) Business operations representative (civilian)
10	Grounds maintenance	Three from contracting office (all civilians) Three from civil engineering QAE (including the program coordinator; all civilians)
11	Grounds maintenance	One QAE for the contract (military)
12	Grounds maintenance	Acting contracting chief (civilian) Contract administrator (civilian) Functional area chief (civilian) QAE (civilian)

Interview Participants by Contract (continued)

13	Grounds maintenance	Civil engineering (military) QAE (civilian)
14	MFH	Director of contract operations (civilian) Contracting civil engineering acquisitions (civilian)
15	MFH	Officer who awarded the contract (civilian) Two from contracting office (one military, one civilian) MFH representative (civilian)
16	MFH	Contracting officer (civilian) Functional chief for MFH (civilian)
17	MFH	Civil engineering (civilian) Contracting office (civilian)
18	Refuse	Contracting office commander (military) Director of business operations (civilian) Three others from contracting office (all civilian)
19	Other (security)	Contract manager
20	Other (variable staff requirement)	Contract specialist (civilian) Functional representative (civilian)
21	Other (communications equipment)	Civil engineering (military) Contract specialist (civilian)
22	Other (training equipment)	Contract manager (military)

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